Search for Earth-Like Planets

Roadmap Integration Interdependencies

Preliminary

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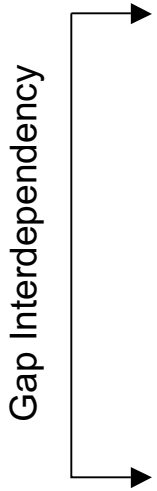
Strategic Roadmaps

Roadmap	Tri - Chairs		
	Directorate	Center	External
1. Robotic and human lunar expeditions	Steidle/Readdy	Howell	T. Stafford
2. Sustained, long-term robotic and human exploration of Mars	Diaz	Elachi	T. Young
3. Sustained program of solar system exploration	Figueroa	Hubbard	J. Lunine
4. Advanced telescope searches for Earth-like planets and habitable environments	Asrar	Bleichman	A. Burrows
5. Develop an exploration transportation system	Steidle	Kennedy	C. Bolden
6. Complete assembly of the International Space Station and focus utilization	Uhran	Cabana	T. Betterton
7. Safely transition from Space Shuttle to new exploration-focused launch systems*	*Deferred**	*Deferred**	*Deferred**
8. Explore the origin, evolution, structure, and destiny of the Universe	Kinney	White	K. Flanagan
9. Determine how living Earth system is affected by internal dynamics, and understand implications for life	Figueroa	Evans	C. Kennel
10. Explore Sun-Earth system to understand effects on Earth and implications for human exploration	Diaz	Einaudi	T. Killeen
11. Transform air transportation and enable the next generation of atmospheric vehicles	Hertz	N/A	J. Jamieson
12. Educate students and public, and expand national technical skills and capabilities	Loston	Earls	F. Cordova
13. Comprehensive national plan for utilization of nuclear systems	Steidle	Scolese	J. Ahearne

= DoD Participation

* Leverages off Integrated Space Operations Summit, (ISOS) process until RTF

Capability Roadmaps



Capability	Responsible Mission Directorate
1.) High-energy power and propulsion	Exploration
2) In-Space Transportation	Exploration
3.) Advanced telescopes and observatories	Science
4) Communication and Navigation	Space Ops
5.) Robotic access to planetary surfaces	Science
6.) Human planetary landing systems	Exploration
7) Human health and support systems	Exploration
8) Human exploration systems and mobility	Exploration
9) Autonomous systems and robotics	Science
10) Transformational spaceport/range technologies	Space Ops
11) Scientific instruments and sensors	Science
12) *In situ* resource utilization	Exploration
13) Advanced modeling, simulation, analysis	Science
14) Systems engineering cost/risk analysis	Exploration
15) Nanotechnology/advanced technology concepts	Science